

I claim:

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1. A computer-implemented method comprising:
inputting a training set including a plurality of images and a corresponding plurality of aesthetic scores for the images;
training a classifier based on the training set; and,
outputting the classifier.
 2. The method of claim 1, further comprising:
inputting an image into the classifier;
generating an aesthetic score for the image based on the classifier; and,
outputting the aesthetic score for the image.
 3. The method of claim 2, further comprising:
generating a recommendation to improve the aesthetic score for the image; and,
outputting the recommendation.
 4. The method of claim 3, wherein generating a recommendation comprises utilizing a gradient ascent.
 5. The method of claim 3, wherein generating a recommendation comprises performing a local search.
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6. The method of claim 1, wherein training a classifier comprises training one of a Bayesian classifier, a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

7. The method of claim 1, wherein training a classifier comprises utilizing feature
5 selection to correlate at least one image feature of the images with their corresponding aesthetic scores.

8. The method of claim 7, wherein utilizing feature selection to correlate at least one
image feature comprises utilizing feature selection to correlate at least one image feature
selected from the group essentially consisting of: color presence, color distribution,
10 geometrical quantities of segmented image parts, coefficients of image transformations,
and higher-level image representations.

9. A computer-implemented method comprising:
inputting an image;
generating an aesthetic score for the image by utilizing a classifier previously
15 trained on a training set including a plurality of images and a corresponding plurality of
aesthetic scores for the images; and,
outputting the image.

10. The method of claim 9, wherein generating an aesthetic score comprises
generating an aesthetic score based on at least one image feature of the image.

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11. The method of claim 10, wherein generating an aesthetic score based on at least one image feature of the image comprises generating an aesthetic score based on at least one image feature selected from the group essentially consisting of: color presence, color distribution, geometrical quantities of segmented image parts, coefficients of image transformations, and higher-level image representations.

12. The method of claim 9, wherein utilizing a classifier comprises utilizing one of a Bayesian classifier, a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

13. A computer-implemented method comprising:
inputting an image and a corresponding aesthetic score for the image previously generated by utilizing a classifier previously trained on a training set including a plurality of images and a corresponding plurality of aesthetic scores for the images;
generating a recommendation to improve the aesthetic score for the image; and,
outputting the recommendation.

14. The method of claim 13, wherein generating a recommendation comprises utilizing a gradient ascent.

15. The method of claim 13, wherein generating a recommendation comprises performing a local search.

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16. The method of claim 13, wherein inputting an image and a corresponding aesthetic score comprises inputting an image and a corresponding aesthetic score for the image previously generated based on at least one image feature of the image.

5 17. The method of claim 16, wherein inputting an image and a corresponding aesthetic score for the image previously generated based on at least one image feature of the image comprises inputting an image and a corresponding aesthetic score for the image previously generated based on at least one image feature of the image selected from the group essentially consisting of: color presence, color distribution, geometrical quantities of segmented image parts, coefficients of image transformations, and higher-
10 level image representations.

18. The method of claim 13, wherein inputting an image and a corresponding aesthetic score comprises inputting an image and a corresponding aesthetic score for the image previously generated by utilizing one of a Bayesian classifier, a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

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19. A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

inputting a training set including a plurality of images and a corresponding plurality of aesthetic scores for the images;

training a classifier based on the training set; and,

20 outputting the classifier.

20. The medium of claim 19, wherein training a classifier comprises training one of a Bayesian classifier, a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

21. The medium of claim 19, wherein training a classifier comprises utilizing feature selection to correlate at least one image feature of the images with their corresponding aesthetic scores.

22. A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

inputting an image;

generating an aesthetic score for the image by utilizing a classifier previously trained on a training set including a plurality of images and a corresponding plurality of aesthetic scores for the images; and,

outputting the image.

23. The medium of claim 22, wherein generating an aesthetic score comprises generating an aesthetic score based on at least one image feature of the image.

24. The medium of claim 22, wherein utilizing a classifier comprises utilizing one of a Bayesian classifier, a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

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25. A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

inputting an image and a corresponding aesthetic score for the image previously generated by utilizing a classifier previously trained on a training set including a plurality

5 of images and a corresponding plurality of aesthetic scores for the images;

generating a recommendation to improve the aesthetic score for the image; and,

outputting the recommendation.

26. The medium of claim 25, wherein generating a recommendation comprises utilizing a gradient ascent.

10 27. The medium of claim 25, wherein generating a recommendation comprises performing a local search.

28. The medium of claim 25, wherein inputting an image and a corresponding aesthetic score comprises inputting an image and a corresponding aesthetic score for the image previously generated based on at least one image feature of the image.

15 29. The medium of claim 25, wherein inputting an image and a corresponding aesthetic score comprises inputting an image and a corresponding aesthetic score for the image previously generated by utilizing one of a Bayesian classifier, a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

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